

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009872**Date Inspected:** 07-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Li Yang, Mr. Li Zhi Nang, Mr. Lv Li Qing

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG BAY 2

This QA Inspector observed ZPMC welder Ms. Cheng Haixia, stencil 045209 is using flux cored welding procedure WPS B-T-2132-3 to make OBG floor beam weld FB3045-001-035. This QA Inspector observed a welding current of approximately 320 amps and 32.0 volts and ZPMC QC Inspector Mr. Zhan Hai Feng has recorded a welding current of 301 amps and 30.4 volts. This QA Inspector observed that Ms. Cheng Haixia is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 5

This QA Inspector observed ZPMC welder Mr. Li Yuanzheng, stencil 217185, is using flux cored welding procedure WPS-B-T-2231-TC-Uc-F to make bikepath cantilever beam weld BK001-041-004. This QA Inspector observed a welding current of approximately 320 amps and 31.0 volts. This QA Inspector observed Mr. Li

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Yuanzheng is certified to make this weld and that ZPMC QC Inspector Mr. Wang Liang is monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Naijun, stencil 205390, is using flux cored welding procedure WPS-B-T-2231-TC-Uc-F to make bikepath cantilever beam weld BK001-040-008. This QA Inspector observed a welding current of approximately 310 amps and 30.0 volts. This QA Inspector observed Mr. Chen Naijun is certified to make this weld and that ZPMC QC Inspector Mr. Wang Liang is monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 9

ZPMC issued "Inspection Notification Sheet" number 4363 informing QA that ZPMC has completed ultrasonic inspections of OBG deck plate closed rib welds in bay 9. This QA Inspector performed ultrasonic inspections of approximately 25 percent length of the following welds: DP3007-001-152, DP3007-001-153, DP3007-001-154, DP3007-001-155, DP3063-001-111, DP3063-001-112, DP3063-001-079, DP3063-001-080, DP3063-001-121, DP3063-001-122, DP3063-001-069 and DP3063-001-070. This QA Inspector observed ZPMC QC personnel had previously marked these welds as being ultrasonically accepted. Items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report.

OBG Bay 13 (Outside)

This QA Inspector observed ZPMC welder Mr. Wang Li, stencil 044772 is using shielded metal arc welding procedure WPS-B-P-2214-FCM-1 to make overhead (4F) welds SEG043-084 and SEG043-085 between diaphragm plates and floor beam FB3045-001. This QA Inspector observed a welding current of approximately 155 amps. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 13

This QA Inspector observed ZPMC welder Ms. Wang Min, stencil 044771 is using welding procedure specification WPS-B-T-3321-B-L2c-S-2 to make submerged arc groove weld SEG067A-014 between side plate SP682-001 and SP504-001. This QA Inspector observed ZPMC Quality Control personnel have recorded a welding current of 608 amps and 30.6 volts and this QA Inspector measured a welding current of approximately 300 amps and 32.0 volts. This QA Inspector confirmed that Ms. Wang Min is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Gao Min, stencil 050988 is using welding procedure specification WPS-B-T-2231-B-U2-F to make flux cored weld SEG068A-018 between deck plate side plate SP555B and side plate SP595B. This QA Inspector observed Ms. Gao Min is certified to make this weld. This QA Inspector observed a welding current of approximately 290 amps and 29.0 volts and ZPMC QC representative Mr. Zhan Hai Feng has recorded a welding current of 306 amps and 30.5 volts. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 14

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This QA Inspector observed ZPMC welder Mr. Xu Liguang, stencil 200114 is using shielded metal arc welding procedure WPS-B-P-2214-TC-U4b-FCM to make weld SSD16-PP80-233. This QA Inspector observed a welding current of approximately 170 amps and ZPMC QC Inspector Mr. Zhang Xian Ji has recorded a welding current of 175 amps. This QA Inspector observed that Mr. Xu Liguang is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhao Guanglin, stencil 044779 is using shielded metal arc welding procedure WPS-B-P-2214-TC-U4b-FCM to make weld SSD16-PP79-253. This QA Inspector observed ZPMC QC Inspector Mr. Zhang Xian Ji has recorded a welding current of 167 amps. This QA Inspector observed that Mr. Zhao Guanglin is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
